Darshan Thakur

Dublin | thakurd@tcd.ie | 089 241 5701 | linkedin.com/in/darshan-thakur | thakurd9.github.io/Portfolio/

Professional Summary

Mechanical Engineer with over 3 years of experience executing mechanical design, simulation, and thermal optimization projects across defense, transportation, and consumer product domains.

Education

Trinity College Dublin, MSc Mechanical Engineering   Sept 2024 – July 2025
- **Grade:** 1:1
- **Coursework:** Advanced Thermal Fluid Design, Low Carbon Transport Technology, Solar Energy.

Mumbai University, BE Mechanical Engineering   July 2018 – August 2021
- **Grade:** 8.92 / 10
- **Coursework:** Finite Element Analysis, Industrial Automation, Mechanical Vibrations, Machine Design.

Professional Experience

Junior Design Engineer, Ansycad Solutions –India   January 2022 – August 2024
- Created 3D CAD models and technical drawings in compliance with ISO and ASME standards.
- Conducted finite element analysis (FEA) and multi-body dynamics (MBD) simulations to validate product performance under structural and dynamic loads.
- Performed computational fluid dynamics (CFD) analysis to improve thermal management for data center enclosures and electronic housings.
- Coordinated with teams in manufacturing, testing, and procurement to deliver final assemblies.
- Documented design processes and addressed client feedback in structured technical reports.
Key projects:
- Defense & Aerospace: Military shelters, Missile transporters, Missile launchers
- Transportation & Mobility: Trailers, Tippers, Cranes

Team Member, Team MH08 Formula Racing – India   January 2019 – August 2020
- Supported chassis design and material selection using CAD tools for performance and safety optimization.
- Assisted in composite manufacturing and assembly, gaining hands-on fabrication experience.

Key Skills

3D Modelling & 2D Drawing: SolidWorks, AutoCAD, Siemens NX, PTC Creo, Autodesk Inventor

Simulation/Analysis Software: Ansys Workbench, Simcenter FLOEFD, Hypermesh, SolidWorks Simulation, SolidWorks CFD, Motion View, EDEM, SimSolid, Abaqus, Fusion 360

Design Standards: ISO, ASME, ASTM, MIL STD

Soft Skills: Team collaboration, Project management, Technical documentation, Critical thinking

Programming Language: MATLAB, Python

Certifications & Memberships

- Certified SolidWorks Associate (CSWA), Dassault Systemes
- Certified in Autodesk Fusion 360 Integrated CAD/CAM/CAE, Autodesk
- Member, American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)
- Project Management Essentials Certified
- Member, Engineers Ireland